

What is claimed is:

1. An inorganic particle-containing composition comprising:

(A) inorganic particles;

5 (B) a binder resin; and

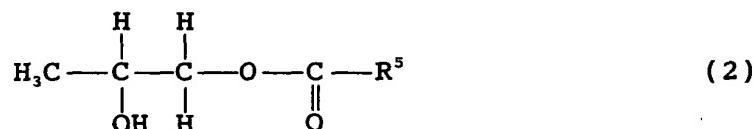
(C) at least one plasticizer selected from the group consisting of compounds represented by the following formula (1):



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wherein R^1 and R^4 are the same or different alkyl groups having 1 to 30 carbon atoms or alkenyl groups, R^2 and R^3 are the same or different alkylene groups having 1 to 30 carbon atoms or alkenylene groups, m is an integer of 0 to 5, and n is an 15 integer of 1 to 10.

and compounds represented by the following formula (2):



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wherein R^5 is an alkyl group having 1 to 30 carbon atoms or alkenyl group.

2. The inorganic particle-containing composition of claim 1, wherein the inorganic particles (A) are at least one electrically co-adhesive particles selected from the group consisting of Ag, Au, Al, Ni, Ag-Pd alloy, Cu and Cr.

3. The inorganic particle-containing composition of claim 1, wherein the binder resin (B) is an acrylic resin containing a polymer unit derived from a compound represented by the following formula (3):



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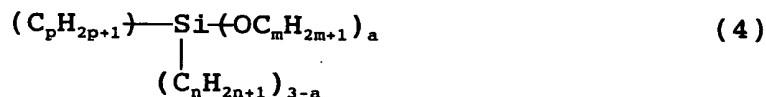
A transfer film and a plasma display panel production process using the composition are also described.

wherein R⁶ is a hydrogen atom or methyl group, and R⁷ is a monovalent organic group.

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4. The inorganic particle-containing composition of
claim 1, wherein the binder resin is at least one member
selected from the group consisting of a homopolymer of a
(meth)acrylate compound represented by the above formula (3),
10 a copolymer of two or more (meth)acrylate compounds
represented by the above formula (3) and a copolymer of a
(meth)acrylate compound represented by the above formula (3)
and other copolymerizable monomer.

15 5. The inorganic particle-containing composition of
claim 1 which further contains a silane coupling agent
represented by the following formula (4):



wherein p is an integer of 3 to 20, m is an integer of 1 to 3, n is an integer of 1 to 3, and a is an integer of 1 to 3.

25 6. The inorganic particle-containing composition of
claim 1 which contains 5 to 80 parts by weight of the binder
resin (B) and 0.1 to 20 parts by weight of the plasticizer
(C) based on 100 parts by weight of the inorganic particles
(A).

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7. A transfer film comprising a base film and a film forming material layer formed of the inorganic particle-containing composition of claim 1 on the base film.

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8. A plasma display panel production process comprising the steps of:

transferring the film forming material layer of the transfer film of claim 7 to the surface of a substrate; and

5 baking the transferred film forming material layer to form an dielectric layer on the substrate.

9. A plasma display panel production process comprising the steps of:

10 transferring a film forming material layer formed of the inorganic particle-containing composition of claim 1 to the surface of a substrate;

forming a resist film on the transferred film forming material layer;

15 exposing the resist film to form a resist pattern latent image;

developing the resist film to form a resist pattern;

etching the film forming material layer to form a pattern layer corresponding to the resist pattern; and

20 baking the pattern layer to form a constituent element selected from the group consisting of a barrier, electrode, resistor, dielectric layer, phosphor, color filter and black matrix.

25 10. A plasma display panel production process comprising the steps of:

transferring a film forming material layer formed of the inorganic particle-containing composition of claim 2 to the surface of a substrate;

30 forming a resist film on the transferred film forming material layer;

exposing the resist film to form a resist pattern latent image;

developing the resist film to form a resist pattern;

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etching the film forming material layer to form a pattern layer corresponding to the resist pattern; and baking the pattern layer to form electrodes.

- 5 11. A plasma display panel production process comprising the steps of:

forming a laminate film consisting of a resist film and a film forming material layer formed of the inorganic particle-containing composition of claim 1 on a base film
10 in the order named;

transferring the laminate film formed on the base film to the surface of a substrate;

exposing the resist film constituting the laminate film to form a resist pattern latent image;

- 15 developing the resist film to form a resist pattern;

etching the film forming material layer to form a pattern layer corresponding to the resist pattern; and

baking the pattern layer to form a constituent element selected from the group consisting of a barrier, electrode,
20 resistor, dielectric layer, phosphor, color filter and black matrix.

12. A plasma display panel production process comprising the steps of:

25 forming a laminate film consisting of a resist film and a film forming material layer formed of the inorganic particle-containing composition of claim 2 on a base film in the order named;

transferring the laminate film formed on the base film
30 to the surface of a substrate;

exposing the resist film constituting the laminate film to form a resist pattern latent image;

developing the resist film to form a resist pattern;
etching the film forming material layer to form a

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pattern layer corresponding to the resist pattern; and
baking the pattern layer to form electrodes.

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